

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows. Please cancel claim 20 without prejudice or disclaimer.

1. (Previously Presented) An electronic device, comprising:
a chip part having an upper surface;
a shielding conductor united with the upper surface of the chip part, the shielding conductor including a ceiling plate section covering the chip part and opposed side plate sections united with and extending below the ceiling plate section and projecting in a horizontal direction around two sides of the chip part; and
a mounting substrate having a ground layer, wherein the side plate sections are electrically connected to the ground layer via a plurality of connecting means,
wherein a width W of the ceiling plate section in a front-rear direction is sized greater than or equal to twice a harmonic mean of a length L of the ceiling plate section in a horizontal direction between the opposed side plate sections and a height H of the ceiling plate section in a vertical direction above the mounting substrate.

2. (Previously Presented) An electronic device, comprising:
a chip part having an upper surface;
a mounting substrate having a mounting surface and a ground layer, wherein the chip part is mounted on the mounting surface of the mounting substrate; and
a shielding conductor comprising: a ceiling plate section united with the upper surface of the chip part and covering the chip part; and

opposed side plate sections united with and extending below the ceiling plate section and projecting in a horizontal direction around two sides of the chip part, wherein the shielding conductor forms openings in a front-rear direction of the shielding conductor and a front-rear direction of the chip part; wherein the opposed side plate sections of the shielding conductor are electrically connected to the ground layer of the mounting substrate via a plurality of connecting means extending in a front-rear direction; and wherein a width W of the ceiling plate section in a front-rear direction is sized greater than or equal to twice a harmonic mean of a length L of the openings in a horizontal direction between the opposed side plate sections and a height H of the ceiling plate section in a vertical direction above the mounting substrate.

3. (Currently Amended) An electronic device, comprising:

a chip part having an upper surface;

a mounting substrate having a mounting surface and a ground layer, wherein the chip part is mounted on the mounting surface of the mounting substrate;

a shielding conductor comprising: a ceiling plate section united with the upper surface of the chip part and covering the chip part;

opposed side plate sections united with and extending below the ceiling plate section and projecting in a horizontal direction around two sides of the chip part; and

opposed opening end sections projecting in a front-rear direction of the shielding conductor and the chip part;

wherein the opposed side plate sections are electrically connected to the

ground layer of the mounting substrate via a plurality of connecting means extending in the front-rear direction; and

an electromagnetic wave absorber disposed between the chip part and at least one of the opposed opening end sections of the shielding conductor,

wherein a width W of the ceiling plate section in a front-rear direction is sized greater than or equal to twice a harmonic mean of a length L of the ceiling plate section in a horizontal direction between the opposed side plate sections and a height H of the ceiling plate section in a vertical direction above the mounting substrate.

4. (Previously Presented) An electronic device in accordance with claim 1, wherein the chip part further comprises:

a two-terminal chip part.

5. (Previously Presented) An electronic device in accordance with claim 1, wherein the width W of the shielding conductor is larger than an area defined by terminals of the chip part.

6. (Previously Presented) An electronic device in accordance with claim 2, wherein the openings formed by the shielding conductor are of a size larger than an area defined by terminals of the chip part, by at least a length L of the openings in the horizontal direction of the ceiling plate section.

7. (Previously Presented) An electronic device in accordance with claim 1,

wherein the plurality of connecting means comprises more than four connecting means.

8. (Previously Presented) An electronic device in accordance with claim 1,

further comprising:

a hole section formed in the ceiling plate section of the shielding conductor to expose at least a portion of the chip part.

9. (Previously Presented) An electronic device in accordance with claim 1,

wherein the shielding conductor further comprises:

a spring substance having an elasticity.

10. (Previously Presented) An electronic device in accordance with claim 1,

wherein the shielding conductor further comprises:

a shape memory metal having a characteristic of a spring;

a hole section formed in the shape memory metal to expose at least a portion of the chip part, the hole section further including end sections,

wherein the chip part is pushed by spring characteristics of the end sections of the hole section.

11. (Previously Presented) An electronic device in accordance with claim 1,

wherein the ceiling plate section, the opposed side plate sections, and a part of the upper

surface of the chip part covered by the shielding conductor also serve as a cathode conductor.

12. (Previously Presented) An electronic device in accordance with claim 1,
wherein the connecting means further comprises:

a bump or a conductor having an elasticity.

13. (Previously Presented) An electronic device in accordance with claim 1,
wherein the chip part further comprises:

an array-shaped chip part including a plurality of two-terminal chip parts integrated in
a front-rear direction.

14. (Previously Presented) An electronic device in accordance with claim
13, further comprising:

two electrodes formed on a mounting surface of the two-terminal chip parts and both
of the electrodes are connected to surface layer electric wiring formed in the horizontal
direction.

15. (Previously Presented) An electronic device in accordance with claim
14, wherein only one of the two electrodes is formed on a mounting surface of each of a
plurality of two-terminal chip parts.

16. (Previously Presented) An electronic device in accordance with claim
15, further comprising:

the one of the two electrodes is connected to a surface layer electric wiring formed in
the horizontal direction; and

an optical waveguide arranged in the horizontal direction in the mounting substrate below the array-shaped chip part.

17. (Currently Amended) A method of manufacturing an electronic device including a chip part mounted on a surface of a mounting substrate, a shielding conductor united with and covering an upper surface of the chip part, wherein the shielding conductor is electrically connected to a ground layer of the mounting substrate, the method of manufacturing comprising:

assembling the chip part with the shielding conductor into a unit, the shielding conductor including a ceiling plate section united to and covering the chip part, and opposed side plate sections united with the ceiling plate section and extending below the ceiling plate section and projecting in a horizontal direction around two sides of the chip part;

arranging on the mounting substrate in which the ground layer is formed the shielding conductor assembled with the chip part into the unit; and

mounting the chip part on a surface of the mounting substrate, and electrically connecting the shielding conductor to the ground layer at the same time, and

sizing a width W of a ceiling plate section of a shielding conductor in a front-rear direction greater than or equal to twice a harmonic mean of a length L of the ceiling plate section in a horizontal direction between opposed side plate sections and a height H of the ceiling plate section in a vertical direction above the mounting substrate.

18. (Previously Presented) A method of manufacturing an electronic device including a chip part mounted on a surface of a mounting substrate, a shielding conductor

united with and covering an upper surface of the chip part, wherein the shielding conductor is electrically connected to a ground layer of the mounting substrate, the method of manufacturing comprising:

arranging the chip part on the mounting substrate on which a ground layer is formed, and mounting the chip part on a surface of the mounting substrate; and

sizing a width W of a ceiling plate section of a shielding conductor in a front-rear direction greater than or equal to twice a harmonic mean of a length L of the ceiling plate section in a horizontal direction between opposed side plate sections and a height H of the ceiling plate section in a vertical direction above the mounting substrate, wherein the opposed side plate sections are united with the ceiling plate section and extend below the ceiling plate section and project in a horizontal direction around two sides of the chip part;

arranging the shielding conductor on the mounting substrate;

electrically connecting the shielding conductor to the ground layer; and

covering an upper surface of the chip part with the ceiling plate section.

19. (Previously Presented) A method of manufacturing an electronic device including a chip part in accordance with claim 17, further comprising:

using a plurality of connecting means when electrically connecting the shielding conductor to the ground layer.

20. (Canceled.)